

Abstract

A multicoat system comprising

(I) at least one constituent (IA) which consists of or comprises mesomorphic polyelectrolyte complexes and which can be prepared by reacting, in a liquid phase (IB), at least one polymeric and/or oligomeric, organic, anionic polyelectrolyte (IC) with at least one polymeric and/or oligomeric, organic, cationic polyelectrolyte (ID) and/or at least one cationic surfactant (IE) or at least one polymeric and/or oligomeric, organic, cationic polyelectrolyte (ID) with at least one anionic surfactant (IF) in a stoichiometric or non-stoichiometric ratio, pouring the resulting liquid phase (IG) onto a substrate or into a mold and allowing it to solidify, and heat-treating the resulting solid (IH);

and

(II) at least one coat (IIA) which is three-dimensionally crosslinked and can be prepared by applying at least one aqueous, thermally curable coating material (IIB) comprising at least one binder (IIC) and at least one crosslinking agent (IID), to the surface of the constituent (IA), and thermally curing the resulting wet film (IIE).